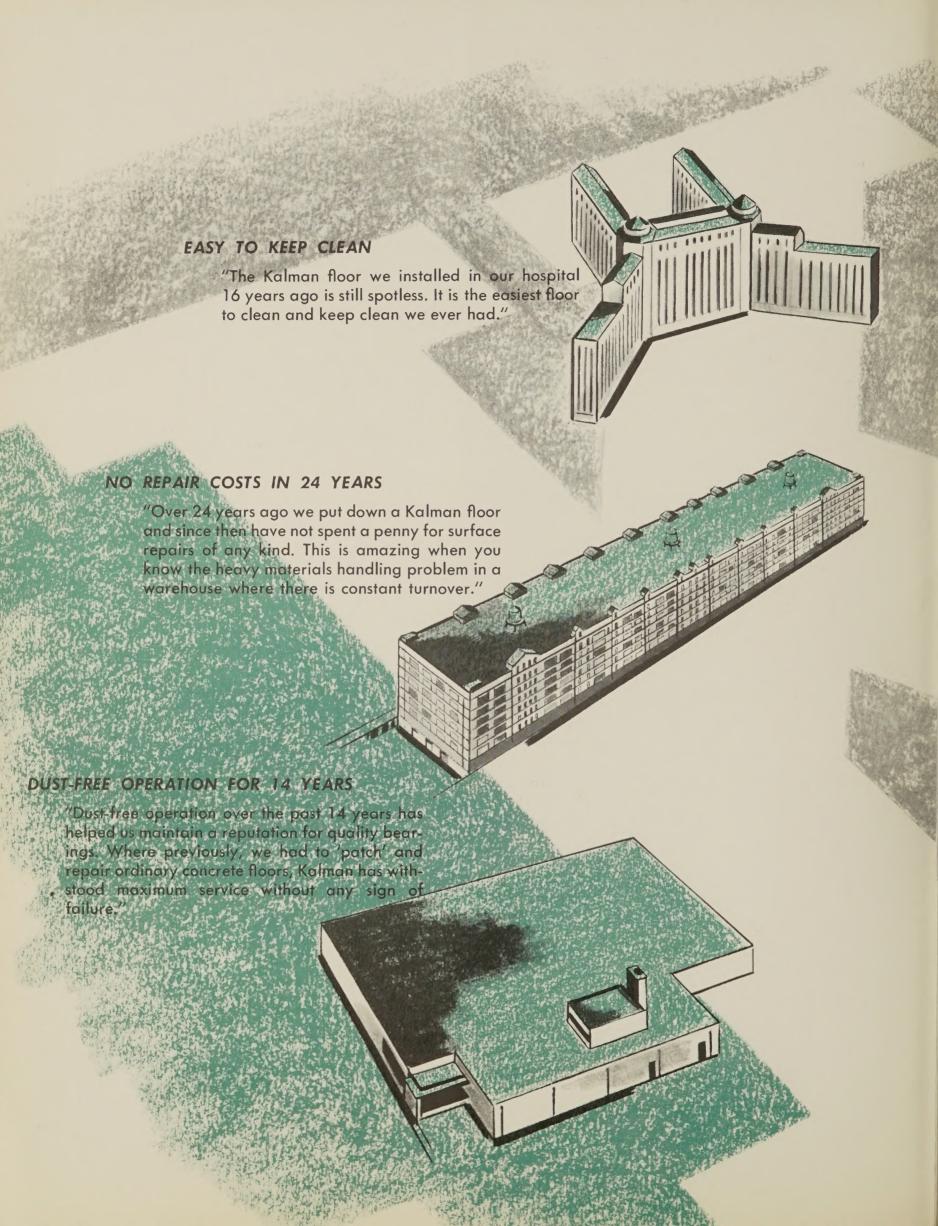
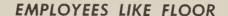
and for the future now..

GRANOLITHIC CONCRETE FLOORS





"Concrete floors were a departure for us in the textile business. We installed 691,737 square feet in a bleachery and found employees liked Kalman better than the previous floor. In addition, we have no replacement or wear problem."

WE BUILT FOR 1984

"In establishing a chain of super food distribution centers, we planned for operation into 1984... and since the floor of any building is subjected to greater use than any other part of the building, we specified Kalman. Investigation of all types of floors indicated that this concrete floor outlasted any other."

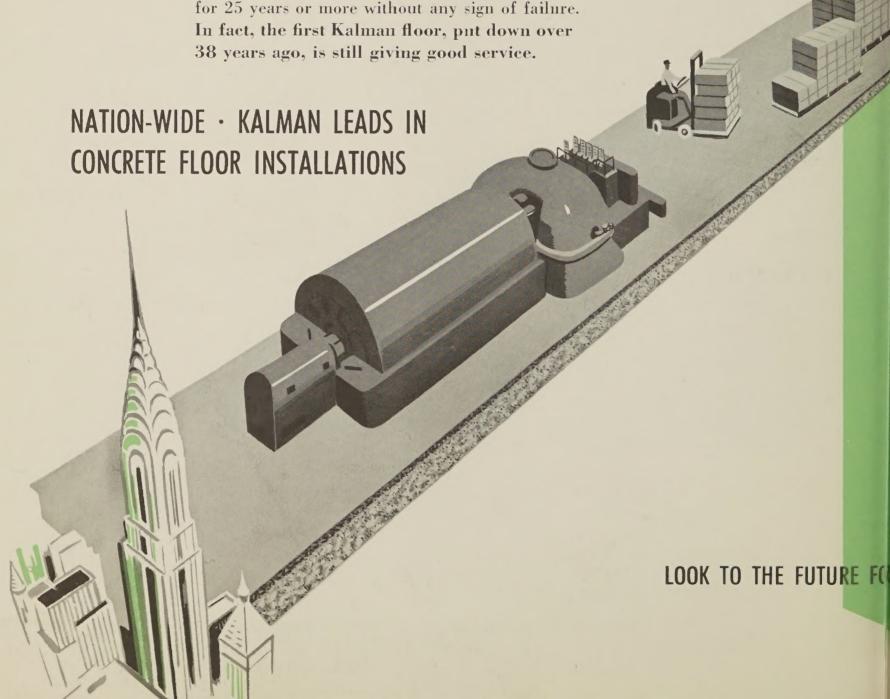
NOT AFFECTED BY VIBRATION AND HEAT

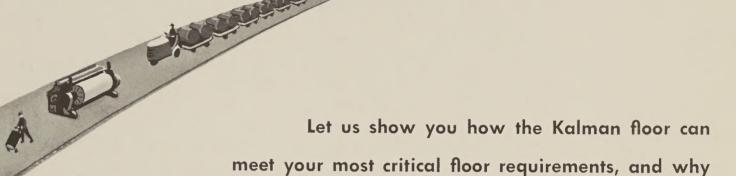
"Power plant operations call for a floor that can take vibration and heat from hundreds of pieces of machinery. Kalman showed us examples of scores of their successful power plant installations, and we have never regretted our decision to specify the 'absorption process' floor. It's now in its twelfth year."



THE FLOOR IS THE BASE FOR EVERY EFFICIENT PLANT OPERATION!

A recent national survey of floor installations shows that architects, contractors, project engineers, plant maintenance men and management executives are specifying more and more hard-top, heavy duty concrete floors for a wide range of building requirements. Proof of the growing demand for this kind of floor is the fact that there are over 280,000,000 square feet of Kalman "Absorption Process" granolithic concrete floors in service today. If all concrete floors put down by the Kalman company since it started in business were laid end to end in a 20-foot wide section, it would form a boulevard stretching from New York to California. Many of these installations have been subjected to rugged daily use for 25 years or more without any sign of failure. In fact, the first Kalman floor, put down over 38 years ago, is still giving good service.





How does Kalman build uniformity and durability into these floors wherever installed in the United States? The answer is that Kalman has developed a permanent national organization of skilled men, many of them trained in Kalman methods for more than a quarter of a century. Using a method and a proprietory process originated by Kalman, these long-experienced crews of experts have laid concrete floors in thousands of buildings for America's leading heavy manufacturers. In addition, Kalman floors today are giving top service in countless warehouses, hospitals, power, public utility, chemical, pharmaceutical, food, beverage and textile plants.

A KALMAN FLOOR

Is denser and harder

Is sanitary and does not disintegrate or dust

Facilitates material handling

Reduces maintenance cost

Has unusually long life

THE LOWEST COST FLOOR







LEADING THE FIELD FOR 38 YEARS

Kalman Floor Company is a national organization with district offices located to serve the entire United States. In each area, crews are employed on a permanent basis specifically trained in Kalman procedures. The company has the resources, ability and organization to handle a floor contract of any magnitude and to

assume full responsibility for the complete installation. Kalman

does not sell materials or any patented "mixes" for



IN EXPERIENCE AND RESEARCH

patching, repair or surfacing of concrete. However, Kalman does supply its own selected materials, and using its absorption process, combined with the finest of workmanship, produces a concrete floor that is unequalled.

Kalman is an independent contractor. As a separate organization it cooperates with builder, or general contractor, architect, or works direct with company personnel and management.

Kalman maintains an engineering staff to aid in the development and specification of floor plans. A contract with Kalman calls for laying a "topping"—a hard, heavy-duty concrete wearing course usually 3/4" thick bonded to the concrete base slab.

However, if requested, Kalman can also install the base slab.

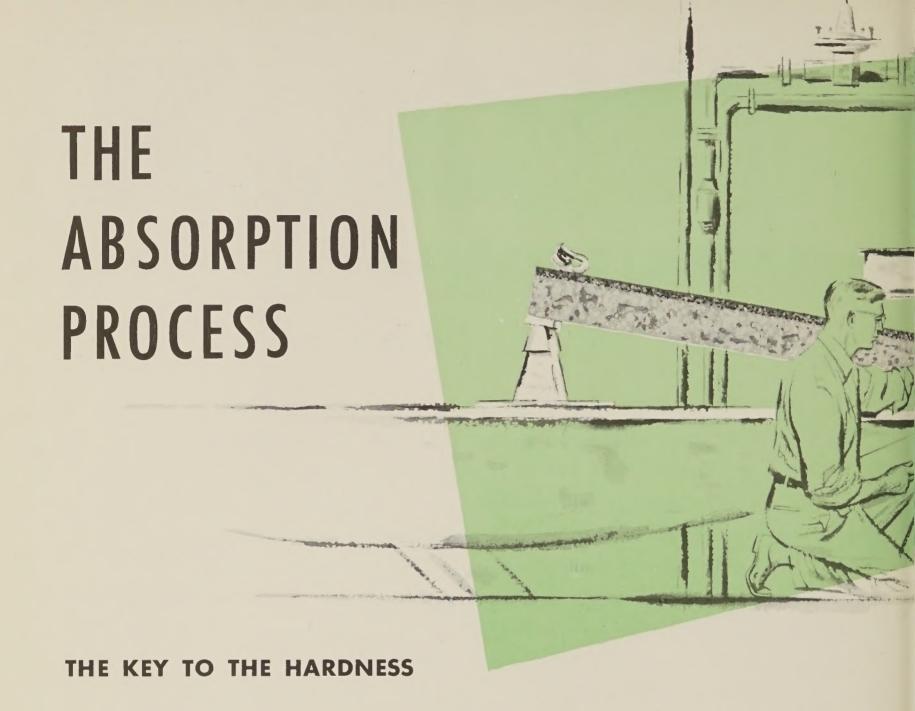
However, if requested, Kalman can also install the base slab.

In either case, this company guarantees its own work,
independent of other contractors. Kalman does supply its own materials,
selecting each to rigid specifications described in detail
later in this book. Kalman is noted for its ability to work harmoniously
with other contractors, especially on complicated jobs
calling for floor installation without interfering with electricians,
steam fitters, masons and equipment men.

KALMAN

COOPERATION

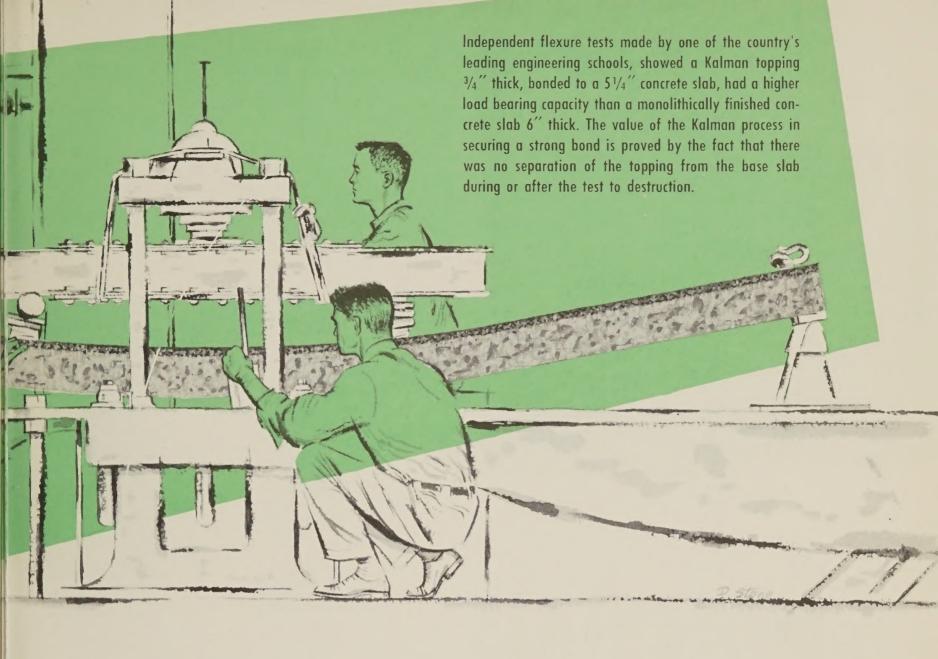
ON THE JOB!



AND DENSITY OF THE KALMAN FLOOR

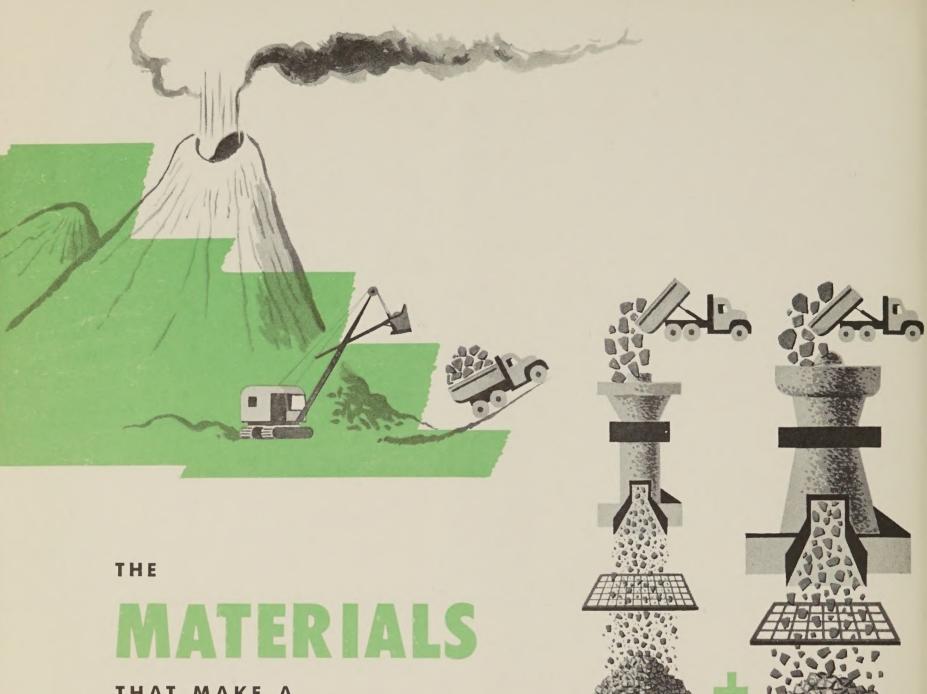
The proper water-cement ratio is one of the most important determining factors in securing a dense, hard floor. Back in 1916 Kalman acquired a patent and developed a scientific method called the "absorption process" specifically to accomplish this objective. Using this unique process, Kalman puts in enough water to assure complete hydration and workability of the mix. The topping is placed, then an absorbing "blanket," removes just the right amount of water at the right time to achieve the proper water-cement ratio for a dense hard floor. During the absorption process, the topping is actually pre-shrunk by the removal of moisture so that maximum density is secured and the topping is drawn to the base slab, forming a perfect bond. This also eliminates shrinkage later on and loss of bond—a fault of ordinary floor laying processes.





The correct water-cement ratio, too, insures that each facet of the hard rock and fine aggregate is fully coated with cement. After water has been removed from the mix by the absorption process, the Kalman topping is so dry and dense it will support a man's weight without indentation. This permits early floating and working—usually within ten to twenty minutes after pouring—so that a smooth, hard surface can be developed before crystallization. As the topping is "worked" through many compacting and troweling actions, it is further densified to produce concrete of maximum homogeneity and highest possible compressive strength. This method eliminates all "voids" which occur when too dry or too wet a mixture is used—a common result with other processes. It also prevents "fines" from rising to the surface.





THAT MAKE A

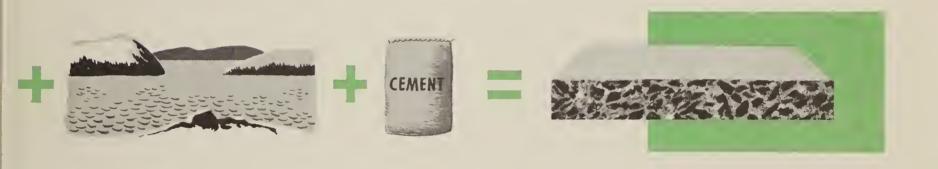
KALMAN CONCRETE FLOOR

What are they? Fine and coarse hard rock aggregate, cement and water! No floor can be better than its component parts, so it is of the utmost importance that the materials used be of the proper grade, type and quality. It is the general practice on an ordinary concrete floor installation to use aggregate from the nearest pit or quarry regardless of quality. Kalman, however, does not accept any except those of proved hardness, toughness and soundness and prides itself on going to great lengths to select, test and specify each element used in its floor. In addition to tests for quality, Kalman makes geological surveys to locate the best quality rock.

FINE AND COARSE HARD ROCK AGGREGATE:

Kalman uses coarse hard rock aggregate of basaltic or granitic origin. This type of hard rock formed millions of years ago by volcanic origin has a dense, fine-grained interlocking crystalline structure. Fine aggregate of the same rock types or high content silica are used. Granulometric, colorimetric, high crushing, hardness and toughness tests regularly conducted by Kalman prove this aggregate to be ideally suited, more than any other type rock, for floor hardness.

If the basaltic or granitic rock which will meet Kalman's standards is not available near the job site, Kalman will bring it from the distant quarries. Rock must be clean, too, or cement will not adhere properly. Kalman has it washed, if necessary, as many times as required to remove all foreign matter.



CEMENT:

Equal time and care go into the selection of cement, the binding agent for the aggregate elements. Cement used is of a selected type formulated for maximum bonding characteristics, minimum shrinkage and maximum chemical resistance to deterioration.



Although the best and latest equipment is employed on a Kalman job . . . nothing has been found to replace manpower in perfecting a concrete floor surface. In addition to the job done by the power driven machines in finishing a floor, the final steps call for long hours of hard hand troweling to secure extreme hardness and density of finished floor. Here again is where Kalman believes it excels any other concrete floor contractor . . . in the willingness to spend the necessary time and money to keep men on the job to carry out each step with the extreme care needed to achieve the perfect finish. During the final, critical operation, there is no set quitting time for Kalman finishing crews. There is no substitute for hard troweling and it must be performed at the proper time depending on climate, temperature and moisture content of the atmosphere. Kalman finishing foremen know from experience when the proper time arrives. Hand troweling continues until the topping emits the distinctive "Ring" and shows a lack of surface moisture that indicates a thoroughly finished floor.

---THE ANSWER



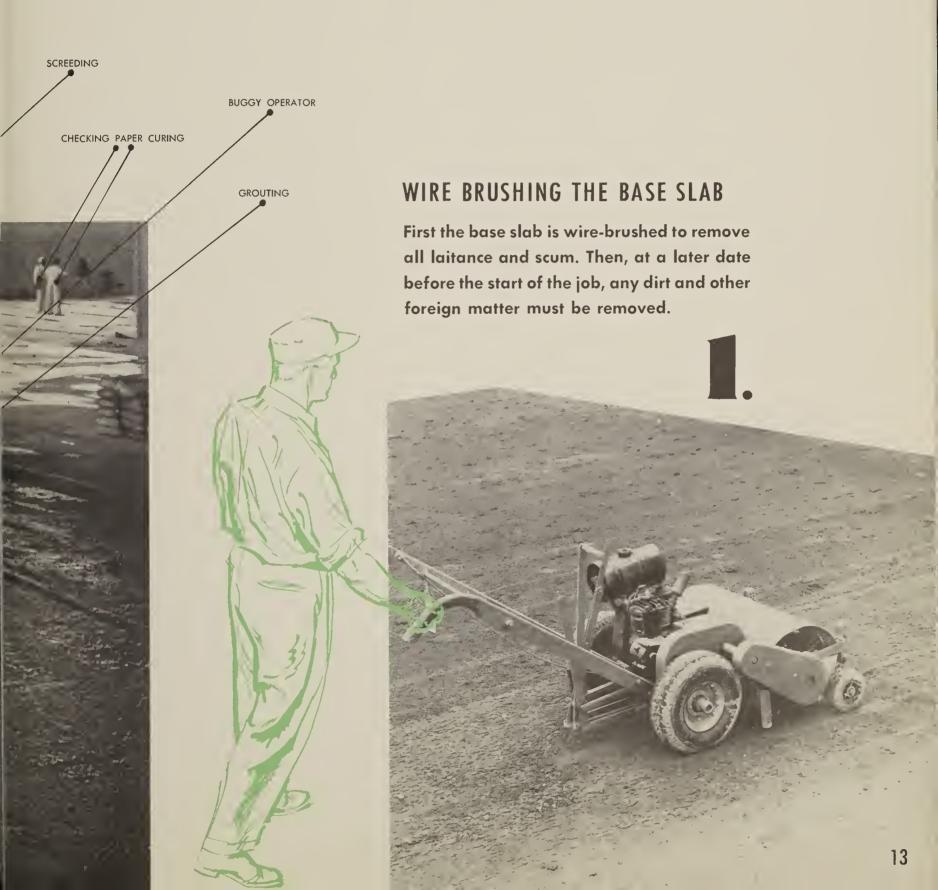
At the right, some of the superintendents, sales engineers, district managers and officers of the Kalman organization.







KALMAN INSTALLS A CONCRETE FLOOR





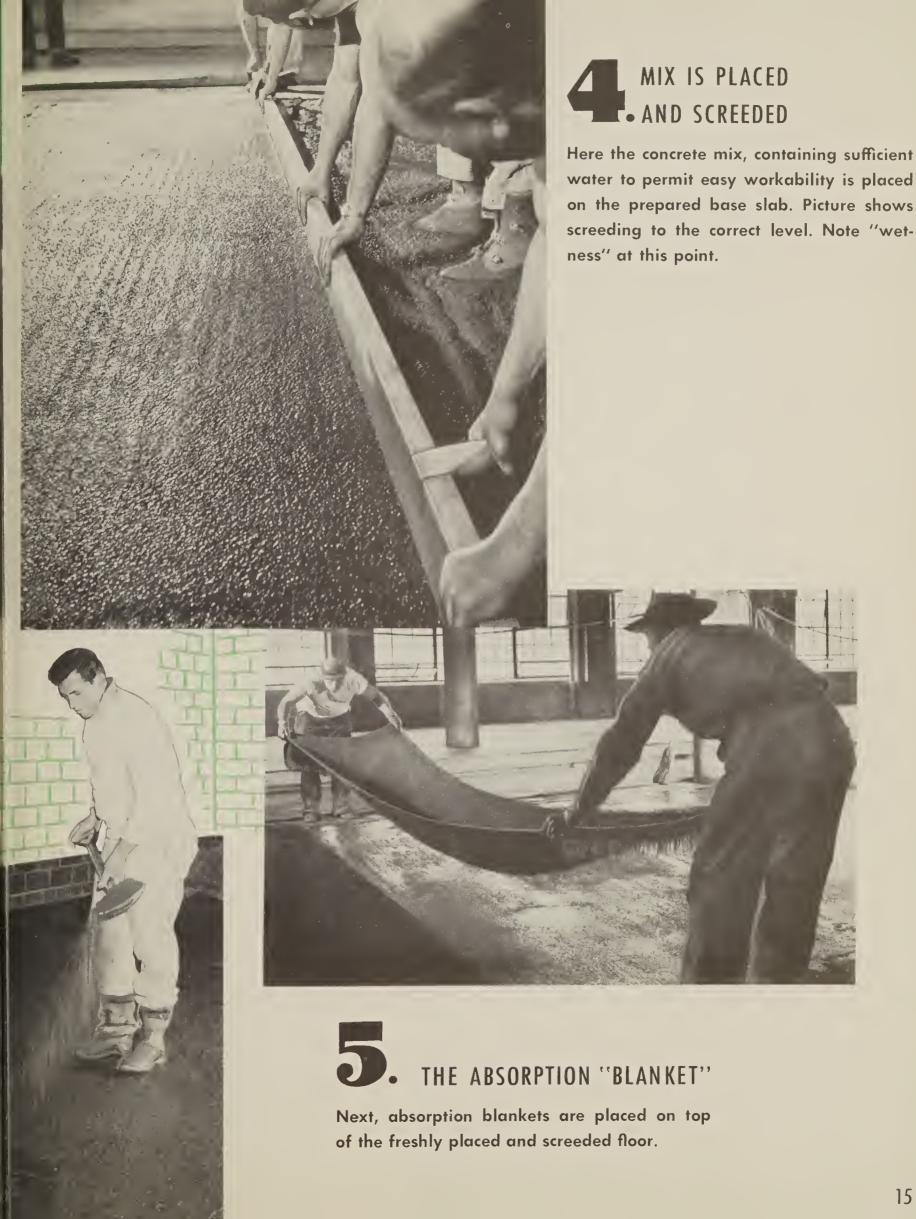
2. WETTING THE SLAB

Then the cleaned surface is wet down, and kept saturated until topping is ready.

WORKING IN GROUT COAT

Just before pouring the mix, excess water is brushed off, a grout coat of cement is distributed over the area and vigorously "worked-in."





THE DRYING AGENT

On top of the "blankets," Kalman crews spread out their drying mixture which acts as a blotting agent and through capiallary action "sucks" up moisture below the surface. The absorption blanket and dry material removes excess moisture used for workability.





UNDERNEATH THE BLANKET ... A HARD SURFACE!

After the proper time has elapsed for obtaining correct water cement balance, according to Kalman's formula, the "absorption blanket" is lifted. Already the topping has been dried to a density where it can support the weight of a man, without indentation.



MECHANICAL TROWELING

9.

Finishing is continued with machine trowels which cover the entire surface many times.







The economical answer to high floor maintenance costs may be resurfacing. By completely resurfacing worn or deteriorated areas, expensive "patching" and manpower waste is eliminated, material handling improved and efficient plant productive operation restored.



THE KALMAN METHOD of resurfacing is to lay a dense, hard-wearing course of concrete topping over the existing base floor. First, of course, the surface must be prepared to receive the Kalman floor. If the old surface is an ordinary monolithic type of concrete, Kalman crews use mechanical equipment to remove a pre-determined section to expose and prepare the underslab. In replacing hardwood, mastic, tile or asphaltic floors, Kalman uses other procedures to establish a firm foundation.

> It should be emphasized here that a Kalman resurfacing job is not a temporary repair job or "patchwork." A Kalman resurfacing actually

URFACING

increases the strength of your original floor because of its higher strength and the strong bond between the "topping" and the base slab. Entire areas are completely resurfaced using the same methods Kalman does on new construction. Kalman's resurfacing operation is carefully scheduled to meet your time and production requirements. The surface obtained is of the same smoothness, uniformity, quality and hardness as on new construction work. Kalman engineers and crews work closely with plant maintenance personnel to arrange work programs so that there is little interference with regular production and a minimum of "down-time."



RESURFACING ESTIMATE

Kalman will gladly make a floor survey and analyze the condition of your floor and make recommendations. This service is offered without obligation and may save you thousands of dollars both for maintenance as well as original construction.

ADVANTAGES OF A





THESE FOUR EXCLUSIVE SUPERIOR QUALITIES

UNIFORM DENSITY

Compacted to maximum density, with the correct watercement ratio, the Kalman process produces a uniform density with complete absence of voids and "soft" spots unduplicated by any other type of concrete floor.

GREATER HARDNESS

Kalman selected, tested aggregate is the hardest obtainable. Scientifically graded for ruggedness and size, then combined with the Kalman formula, it produces a concrete floor that is the closest surface to a slab of solid rock developed by man.

PERFECT SMOOTHNESS

In addition to Kalman's "absorption process" which insures a uniform topping, the extra time and effort put in by skilled, long experienced finishers results in the smooth surface only obtainable by Kalman methods.

UNIFORM STRENGTH

Controlled, even distribution of aggregate throughout the topping area by exclusive Kalman methods results in uniformly high strength and hardness.



CONCRETE FLOOR

.. PROVIDE THESE IMPORTANT ADVANTAGES!

EXCEPTIONAL LONG LIFE

Service records of 25 years or more are usual for a Kalman floor, even under the most rugged service.

GREATLY REDUCED MAINTENANCE

Used under conditions for which it is designed and specified, a Kalman floor will not pit or "rut" . . . thus entirely eliminating "patching" and costly time and materials repair.

FACILITATE MATERIALS HANDLING

Heavy fork lift trucks, will not harm a Kalman floor, built to withstand this type of load. Smoothness of surface eases movement of materials and absence of "soft spots" eliminates floor failure and hazards.

EASY TO CLEAN

Ordinary good plant housekeeping, brooming or washing is sufficient to maintain a Kalman floor in perfect surface condition.

RESISTANT TO DUSTING

Kalman is as close to a "non-dusting" floor as it is possible to build. Its extra hardness and smoothness mean "dusting" is eliminated for all practical purposes in precision manufacturing operations or pharmaceutical laboratories.

PROMOTES BETTER SANITATION

Because of its extreme density and smoothness, Kalman does not collect dirt, dust and foreign matter. Washing with antiseptic solutions does not hurt the surface.



The initial cost amortized over the minimum life of the floor, means Kalman is by far the lowest cost floor obtainable today.

LOWEST COST CONCRETE FLOOR

FOR THE FUTURE



- - and abrasive surfaces available

A Kalman concrete floor may be produced in any one of the following colors: red, brown, black, gray, or green. Color is not a surface coating, but is integral with the floor itself. In other words, Kalman color will not wear off.

> Abrasive Surfaces: If desired, standard abrasive materials, such as alumina oxide or other substances that provide a "gripping" surface may be added to the Kalman concrete floor topping.

A partial list of nationally known users of

KALMAN FLOORS

THE COCA-COLA CO. SEARS ROEBUCK & CO. GOODYEAR TIRE & RUBBER CO., INC. BEAUNIT MILLS. INC. PACIFIC GAS & ELECTRIC CO. WESTERN ELECTRIC CO., INC. UNION PACIFIC RAILROAD NATIONAL BISCUIT CO. PROCTOR & GAMBLE CO. SWIFT & COMPANY ATCHISON, TOPEKA & SANTA FE RAILWAY SYSTEM U. S. VETERANS HOSPITALS LEVER BROS. CO. GUIDE LAMP DIV. GM LINDE AIR PRODUCTS DIV. SUNBEAM CORPORATION PHELPS DODGE REFINING CORP. U. S. RUBBER CO. SEEGER REFRIGERATOR CO. H. J. HEINZ CO. SUNSHINE BISCUIT, INC. MENGEL BODY CO. C&O R.R. CO. P. LORILLARD CO. FIRST NATIONAL STORES, INC.

PACKARD ELECTRIC DIVISION GM GENERAL BAKING CO. U. S. MINT OWENS ILLINOIS GLASS CO. BEECHNUT PACKING CO. GENERAL MILLS, INC. COLUMBIA STEEL & SHAFTING CO. ETHYL CORP. MEAD JOHNSON & CO. AMERICAN WEEKLY (THE) GENERAL ICE CREAM CORP. SAFEWAY STORES, INC. COLGATE-PALMOLIVE-PEET CONNECTICUT STATE HOSPITAL AMERICAN CYANAMID CO. PRATT-WHITNEY DIV. BRIDGEPORT BRASS CO. FAFNIR BEARING CO. (THE) REMINGTON ARMS CO., INC. A & P ELECTROLUX CORP. E. I. DUPONT de NEMOURS & CO., INC. HARVARD UNIVERSITY U. S. NAVAL AIR STATION U. S. SUGAR CORP. MAXWELL HOUSE DIV. CORP. GF ST. REGIS PAPER CO. AMERICAN CAN CO. GEORGIA STATE PRISON CHICOPEE MFG. CO. ATLANTIC COAST LINE R.R. CO. TEXTRON SOUTHERN CO. DUBLIN WOOLEN MILLS COMMONWEALTH EDISON CO. THE SPRINGS COTTON MILLS FLEISCHMANN YEAST B&O RAILROAD ILLINOIS BELL TELEPHONE CO. CARNEGIE ILLINOIS STEEL CHICAGO & ALTON R.R. A. E. STALEY MFG. CO. THE PENNSYLVANIA R.R. F. W. WOOLWORTH CO. AMERICAN STEEL & WIRE DIV. REED CANDY CO. REMY ELECTRIC DIV. GM SPRINGFIELD ARMORY NEW DEPARTURE DIV. GM

U. S. COAST GUARD

KALMAN FLOOR COMPANY, INC.
110 EAST 42nd STREET . NEW YORK 17, NEW YORK

KALMAN DISTRICT OFFICES ATLANTA BOSTON CHARLOTTE CHICAGO CLEVELAND DAYTON DETROIT HOUSTON LOS ANGELES PHILADELPHIA SAN FRANCISCO KALMAN FLOOR COMPANY, INC. 110 EAST 42nd STREET . NEW YORK 17, NEW YORK